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Finding of No Significant Impact
Purchase of Additional CT Capacity
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FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

FINAL GENERIC ENVIRONMENTAL ASSESSMENT
FOR THE PURCHASE OF
ADDITIONAL COMBUSTION TURBINE CAPACITY

The Tennessee Valley Authority (TVA) proposes to purchase and operate existing combustion turbine (CT) or combined-cycle combustion turbine (CC-CT) plants located in or near the Tennessee Valley. These are plants that have already been constructed and are now being sold by current owners. Some of the plants may be operating, may have been operated in the recent past, or may have been mothballed for some interim period of time.

TVA is proposing to purchase and operate these facilities to address the increasing demand for peak and intermediate load electrical power in the TVA power service area. The subject environmental assessment (EA) tiered from TVA's Energy Vision 2020 Integrated Resource Plan Final Environmental Impact Statement, which identified and analyzed the environmental impacts of a selected suite of alternative methods, including CT/CC-CT plants, to meet the increasing demand for electrical power in the TVA region. Additionally, acquisition of such facilities would assist TVA in meeting the new regional reliability standards of the North American Electric Reliability Council (NERC), which require power companies to activate sufficient reserves to meet NERC's Disturbance Control Standard (DCS). Having assessed the impacts of individual CC/CC-CT projects implemented in the past, TVA determined that this group of actions (namely the purchase and operation of existing CT/CC-CT plants) lent themselves to a generic assessment. Accordingly, the purpose of the subject EA was to document, on a generic basis, the potential environmental impacts associated with this proposal. The EA would serve as documentation that the class of actions involving the purchase and operation of existing CT/CC-CT plants qualifies as a categorical exclusion (CE) under Section 5.2.28 of TVA NEPA Procedures. While the objective is to expedite the review process, this EA would also help a reviewer decide if a proposed action fits within the classes of actions listed in the EA. Under the No Action alternative TVA would not purchase or operate such CT or CC-CT facilities. The No Action alternative does not meet TVA's need for additional peaking and intermediate capacity, and is, therefore not considered reasonable. Under the Proposed (and Preferred) Action alternative TVA would purchase and operate existing CC/CC-CT plants in order to meet its peak and intermediate capacity needs for power.

As described and established in the subject EA and shown in Table 1 below, existing CC/CT plants that are being considered for purchase would be placed within one of three classes as to the applicability of NEPA. This generic EA applies to almost all of the plants that may fall within Class 3 of Table 1. If there are no extraordinary circumstances, a CE Checklist would be completed to verify the use of CE 5.2.28. If a specific plant has unusual operating characteristics or unusual impacts on sensitive resources, additional environmental review would be conducted before acquiring and operating such a plant.

Table 1. Applicability of Generic Environmental Assessment to Proposals to Purchase Combustion Turbines		
Class	Plant Characteristics	NEPA Status
1	The plant is currently operating or has operated within the last two years, and necessary environmental permits to operate the plant remain effective.	NEPA does not apply
2	The plant has been mothballed for longer than two years and/or necessary environmental permits to operate the plant have been allowed to lapse. However, the plant has not been permanently shut down, and operation in the future is expected. Indicia suggesting this include, but are not limited to, (1) statements of the current owners that shutdown is not permanent, (2) continued maintenance of equipment, (3) minimal cost to bring the plant back into operation, and (4) minimal time is needed to restart the plant.	NEPA does not apply
3	The plant does not fall within Class 1 or 2.	NEPA applies

Drawing upon the experience gained from previous environmental reviews of combustion turbine projects, TVA evaluated the Proposed Action for potential impacts on air quality, noise, and water resources and with regard to the potential for cumulative impacts. Based upon an evaluation of the emissions of criteria and hazardous pollutants emitted from a representative combustion facility, and the limitations on air emissions that the various applicable federal, state, and local air permitting processes impose, potential impacts to air quality were deemed environmentally acceptable and insignificant. Prior to operating any plant that it acquires, TVA would ensure that applicable emission control requirements are met. Regarding noise, prior to initiating operation of any acquired CC-CT plant, TVA would ensure that noise does not exceed the guidelines of the Department of Housing and Urban Development through the evaluation and measures identified in the EA. Regarding potential impacts to water resources, TVA would ensure that permit limitations, safeguards, and measures are in place to provide adequate protection from potential impacts of heat discharges associated with cooling water and of storm water runoff, as well as those impacts associated with fuel and chemical storage. The EA concludes that the overall impact from the purchase and operation of existing CC/CC-CT plants is insignificant.

Based on the analysis in the attached TVA-prepared EA and the identified commitments listed in the section titled "Summary of Environmental Commitments" of the subject EA, we conclude that implementation of the Proposed Action alternative would not be a major federal action significantly affecting the environment. Accordingly, an Environmental Impact Statement is not required.

September 15, 2006

Jon M. Loney, Senior Manager NEPA Policy Environmental Stewardship and Policy Tennessee Valley Authority Date Signed